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TITLE: Developing a Training Program in Breast Cancer Research to Decrease the Disparity of Morbidity and Mortality in Underserved/Minority Women

PRINCIPAL INVESTIGATOR: Bobbie Reddick EdD, RN

CONTRACTING ORGANIZATION: Winston-Salem State University Winston-Salem, NC 27110

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|  | od Historically Plac  | ok Callaga and Haiv                | arcity (UDCLI) is son  | amittad ta raa                     | alving same of the accompanie social  |
| WSSU, a designated Historically Black College and University (HBCU) is committed to resolving some of the economic, social       |   |                                    |  |                                    |   |
| and health problems in the community in which the university is located. Breast Cancer deaths and complication occur             |   |                                    |  |                                    |   |
| disproportionately in minority women than majority women within this community. This proposal is designed to develop a           |   |                                    |  |                                    |   |
| sustainable breast cancer training program at WSSU. Three faculty post docs and (2) faculty trainees from the SOHS are           |   |                                    |  |                                    |   |
| developing research skills by engaging in breast cancer research with professors at Johns Hopkins University who are experts     |   |                                    |  |                                    |   |
| in this area. The o  | bjectives of this trai  | ning program are to                | allow the trainees tl  | he opportunit                      | y to develop fundable research  |
| proposals, to conduct successful clinical research projects, and to publish and to train other WSSU researchers. The faculty     |   |                                    |  |                                    |   |
| post docs will be able to apply their knowledge to assist minority elderly women to learn how to discover signs of cancer before |   |                                    |  |                                    |   |
| the cancer becomes hard to treat. Consistent with year 4 objectives, the faculty post docs have attended several training        |   |                                    |  |                                    |   |
|  |   |                                    |  |                                    |   |
| activities, submitted research abstracts and grant applications, presented in scientific conferences, and are continuously       |   |                                    |  |                                    |   |
| designing the program for future WSSU researchers.   |   |                                    |  |                                    |   |
|  |   |                                    |  |                                    |   |
| 15. SUBJECT TERMS  |   |                                    |  |                                    |   |
| Disparity of morbidity and mortality; breast cancer; minority elderly women; clinical oncology; biobehavioral measures of        |   |                                    |  |                                    |   |
| stress; quality of life; tumor markers   |   |                                    |  |                                    |   |
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## INTRODUCTION

Winston-Salem State University alone with the collaborating institution, Johns Hopkins University's SON, planned a one-year continuation training program for three (3) post-doctoral WSSU faculty members and two WSSU researcher trainees (faculty members) from the School of Health Sciences (SOHS). The training program, along with finalizing the establishment of the Research Center completed the breast cancer activities for the grant award.

The post-docs became Scholars at the Center of Health Disparities Research at Johns Hopkins University School of Nursing. Each of the post-docs received mentoring directed to their individual research needs throughout the year. The WSSU trainees were expected to begin writing grant proposals and articles for publications.

The recommended activities for the continuation included: (1) Dr. Gaston-Johansson continued mentorship of Drs. Ryman and Reddick, (2) the two new trainees, Dr. Holland and Dr. Perez-Brown will work with the post-docs in existing projects (3) the post-docs present their research at a national conference, and (4) one interdisciplinary meeting held at Winston-Salem State University. Dr. Bobbie Reddick, post-doc, also assumed the role of PI for the grant.

# **BODY**

The faculty, post-docs and trainees have been very productive during this report year. They have written several grants, submitted several research proposals, articles for publication and presented research at various conferences. Dr. Flack, previous PI, Dr. Gaston-Johannson and post-docs Dr. Reddick and Dr. Radwan attended the 2<sup>nd</sup> Annual Minority Institution/Cancer Center Partnership Funded Investigators Workshop September 12-13, 2006, in Bethesda, Maryland. Dr. Reddick presented the outcomes of the training grant and the impact of the grant on the scholarship of the faculty in the SOHS at WSSU.

Mentorship occurred with mentor, Dr. Fannie Gaston-Johannson via email, telephone conferences, and one face-to-face meeting. The faculty trainees received mentoring and training on various components of the research process through formal and informal interaction with post-docs, attending brown bag sessions held in the SOHS, and conducting literature searches. Additionally, the PI of this project has also had consistent interactions with all involved in the project. Meetings were held to discuss project objectives, identify trainees learning needs, plans for achieving objectives and meeting learning needs, and reporting accomplishments and outcomes. The PI and Dr. Fannie Gaston-Johannson, the co-investigator of the project from JHU, communicated monthly, and have worked together on several projects. They include a pre-proposal for a Center of Excellence titled "Multimodal Therapies to Prevent and Treat Symptom Clusters in Women with Breast Cancer"; a proposal for a pilot study on "Symptom Prevention and Management in African American Women with Breast Cancer; and a paper on symptom clusters in women with breast cancer.

## **SCHOLARSHIP**

The post docs and faculty trainees have participated in a number of scholarly activities, including grant proposal writing, conducting pilot studies, and developing and publishing manuscripts. Grant funding was received from the Center for Collaborative Research at Thomas Jefferson University, Philadelphia, PA by Drs. Radwan, Reddick and Perez-Brown to attend an eHealth Promotion Training Institute. As a result of the training, they submitted a grant and received funding from the UNCFSP/NLM-HBCU Access Project. Dr. Holland and Dr. Reddick, each received funding for pilot studies from The Center for Innovation in Health Disparities Research, a NIH/NINR P20 Center grant. In addition, faculty published in peer-reviewed journals, and presented at local and national conferences.

#### KEY RESEARCH ACCOMPLISHMENTS

## **Publications**

- Reddick, B., Nanda, J., Campbell, L., Ryman, D. and Gaston-Johansson, F. (2005). Examining the influence of coping with pain on depression, anxiety, and fatigue among women with breast cancer. *Journal of Psychosocial Oncology*. 23 (2/3), 137-157. Available online at http://www.haworthpress.com/web/JPO.
- Farmer, D., & Reddick, B. (2006). Psychosocial correlates of mammography screening in older African American women. *Oncology Nursing Forum* (scheduled for press January, 2007).
- Aragon, S., Flack, S., Holland, C., Richardson-Ingram, R., and Clements, M. (October, 2006). The influence of patient centeredness on minority and socioeconomically disadvantage patients' trust in their physician: An evidence-based structural equation modeling investigation. *Journal ofHealth Disparities Research and Practice*. 1 (1).
- Ryman, Denny. Oncologist's usage of breast cancer tumor markers in clinical practice. *Journal of Clinical Laboratory Science*. (scheduled for press February, 2007)

# Research Support

## UNCFSP/NLM -HBCU Radwan (PI)

10/2/06 - 9/30/07

A Campus and Community-Based e-health Program: Increasing e-Health Literacy and Improving Health Behaviors This pilot will use faculty and graduate students to instruct the local underserved community on how to access and utilize reliable internet resources for health care education

Co-PI & Project Coordinators – Perez-Brown and Reddick

NIH/NINR Reddick (PI)

7/1/06 - 6/30/07

Center for Innovation in Health Disparities Research

An Intervention to Increase Breast Cancer Screenings by African American Women

This pilot study will develop and evaluate the feasibility and acceptability of intervention strategies to increase breast cancer screening among African American women

eHealth Training Institute, Center for Collaborative Research.

June, 2006

Received funding and completed 40 hours of the eHealth Promotion Training Institute sponsored by the Center for Excellence in eHealth Promotion, Thomas Jefferson University, Philadelphia, PA

Participants - Radwan, Reddick, Perez-Brown

NIH/NINR Holland (PI)

7/1/06-6/30/07

Center for Innovation in Health Disparities Research

Cardiovascular health education in college age students: An experiential approach

The purpose of this pilot is to develop and assess the impact of a culturally sensitive, education and age appropriate Cardiovascular Health Education Curriculum.

#### **Presentations**

#### Reddick, Bobbie

"Factors Affecting Mammography Screening in Older African American Women" National Society of Allied Health. March 23-26, 2006, Charlotte, NC.

"Factors Affecting Mammography Screening in Older African American Women" NC Conference on Aging, October 19-21, 2005, New Bern, NC.

"Breast Cancer Screening Adherence Among Older African-American Women" Piedmont Alliance for Cancer Research and Education (PACRE), March, 2005, Winston-Salem, NC.

## Radwan Hamdy

"The Access and Use of Internet Breast Cancer Information by African American Women" AOTA Annual Conference and Expo, St. Louis, MO, April 20-23, 2007.

"Increasing the Number of Minority Physical Therapy Students to Reduce Health Disparities in North Carolina" 15<sup>th</sup> International Congress of World Confederation for Physical Therapy, Vancouver, Canada, June, 2-6, 2007.

"The Impact of e-Learning on Post Professional Physical Therapy Education" 5<sup>th</sup> International Internet Education Conference, ICT-Learn 2006, Cairo, Egypt. September 11-13, 2006

#### Perez-Brown, Darlene

"The Access and Use of Internet Breast Cancer Information by African American Women" AOTA Annual Conference and Expo, St. Louis, MO, April 20-23, 2007.

## Poster Presentations

## Holland, Cecil

"The influence of patient centeredness on minority and socioeconomically disadvantage patients' trust in their physician: An evidence-based structural equation modeling investigation" National Society of Allied Health. March 23-26, 2006, Charlotte, NC.

#### Reddick, Bobbie

"Factors Affecting Breast Cancer Screening Adherence in Older African American Women" Southern Nursing Research Society (SNRS) 20<sup>th</sup> Annual Conference, February 2-4, 2006, Memphis, Tennessee.

## REPORTABLE OUTCOMES:

- Dr. Bobbie Reddick published an article "Examining the influence of coping with pain on depression, anxiety, and fatigue among women with breast cancer" in the *Journal of Psychosocial Oncology*. 23 (2/3)(2005), 137-157.
  Available online at http://www.haworthpress.com/web/JPO.
- Dr. Bobbie Reddick received funding for a pilot study "An Intervention to increase breast cancer screenings by African American women" from the CIHDR.
- Dr. Bobbie Reddick presented "Factors affecting mammography screening in older African American women" at the national Society of Allied Health, March, 2006, Charlotte, NC.
- Dr Bobbie Reddick presented "Factors affecting mammography screening in older African American women" at the NC Conference on Aging, October, 2005 in New Bern, NC.
- Dr. Bobbie Reddick presented "Breast cancer screening adherence among older African American women" at the Piedmont Alliance for Cancer Research and Education (PACRE), March, 2005 in WS, NC.
- Dr. Bobbie Reddick has an article in press "Psychosocial correlates of mammography screening in older African American women" in *Oncology Nursing Forum* (January, 2007).
- Dr. Hamdy Radwan, Dr. Darlene Perez-Brown & Dr. Bobbie Reddick received funding for a pilot study "A Campus and Community-based e-health program: Increasing e-Health Literacy and Improving health behaviors" for from UNCFSP/NLM.
- Dr. Hamdy Radwan, Dr. Darlene Perez-Brown, & Dr. Bobbie Reddick received funding for "An e-Health Promotion Training Institute" for from the Center for Excellence in e-Health Promotion at Thomas Jefferson University.
- Dr. Hamdy Radwan, & Dr. Darlene Perez-Brown will present "The access and use of Internet Breast Cancer information by African American women" at the AOTA Annual Conference and Expo, April, 2007 in St. Louis, MO.
- Dr. Denny Ryman has an article scheduled for press "Oncologist's usage of breast cancer tumor markers in clinical practice" in the *Journal of Clinical Laboratory Science* (February, 2007).

## Conclusion

This training program has been very successful in achieving its' goal to develop a sustainable breast cancer research program for faculty at a HBCU. The faculty have been very productive and have increased their scholarship activities. The faculty have used their research skills to conduct successful clinical research projects, to write grants, to publish, and to mentor other WSSU faculty in research. In addition, they have provided avenues for students to have first hand experiences in conducting research projects that address disparities in minority health care and in assisting minority elderly women learn how to discover signs of breast cancer before they are hard to treat.